

6 implanting a first pocket implant into the semiconductor substrate from a first side of
7 the gate; and
8 implanting a second pocket implant into the semiconductor substrate from a second
9 side of the gate, wherein the first pocket implant is approximately in contact with the second pocket
10 implant.

cont.
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28. (Amended) The method of claim 27 further comprising diffusing the first
pocket implant and the second pocket implant laterally in the semiconductor substrate.

35. (Amended) A method of fabricating a transistor in an integrated circuit
device comprising:
3 providing a semiconductor substrate;
4 forming a gate oxide on the semiconductor substrate;
5 forming a gate on the gate oxide;
6 implanting a first pocket implant and a second pocket implant into the semiconductor
7 substrate using the gate as a mask; and
8 diffusing the first and second pocket implants laterally causing the first pocket
9 implant to merge with the second pocket implant.

36. (Amended) The method of claim 35 wherein the diffusing increases a
reverse short channel effect of the transistor.

37. (Amended) The method of claim 35 further comprising implanting an
enhancement implant in the semiconductor substrate.

38. (New) A method of fabricating a transistor in an integrated circuit
device comprising:
3 providing a semiconductor substrate;
4 forming a gate oxide on the semiconductor substrate;
5 forming a gate on the gate oxide;
6 implanting a first pocket implant into the semiconductor substrate from a first side of
7 the gate at an angle; and

8 implanting a second pocket implant into the semiconductor substrate from a second
9 side of the gate at an angle,
10 wherein the concentration of pocket implant under the gate is nonuniform.

1 39. (New) The method of claim 38 further comprising diffusing the first
2 pocket implant and the second pocket implant laterally in the semiconductor substrate.

1 40. (New) The method of claim 38 wherein the first pocket implant and
2 the second pocket implant are implanted using the gate as a mask.
